

Commercial Waste Reduction and Recycling Manual

Waste Reduction, Recycling
and Litter Control Program
Washington State Department of Ecology

September, 1990
Revised January, 1992
Publication Number 90-36


 *printed on recycled paper*

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This manual was written to assist you in setting up and operating a Waste Reduction and Recycling (WR/R) program. It provides a basic framework from which you can construct a program that addresses your business's specific needs. The steps outlined in this manual apply to any business regardless of type or geographic location. To achieve the best results from your WR/R program we recommend you contact local people knowledgeable in the subject. Appendices are included in the back of this manual to provide access to these people and other information you might need.

The Department of Ecology would like to acknowledge the efforts of Holly Rich, for the research and development of the manual, Pinky Feria for the design and layout, and Clint Davidson for the illustrations. We would also like to thank Randy Durham of the Washington Retail Association for his input as well as Ecology employees Laura Arnow, Jerry Thielen, Jonna VanDyk and Rebecca Voerman for their review and comments. We also appreciate the many others who gave time and effort to the creation of this document.

CONGRATULATIONS!

Deciding to reduce waste and recycle in your business will improve the efficiency of your workplace and the quality of your environment. Your decision will cut disposal costs and lessen the severity of the solid waste dilemma. Congratulations on addressing two issues that every agency, business, and individual needs to face.

Your interest in WR/R is probably shared by others in your workplace. If, however, you are not the sole owner of the business, you will need to consult with other management personnel. Use the "Benefits to Your Business" section below to convince skeptics that WR/R is good business.

BENEFITS TO YOUR BUSINESS

The basis for making most business decisions is to improve the bottom line. Waste reduction and recycling will do this. With less material going to the dumpster, your pick-up fees will decrease. Some recyclable materials may even generate a new source of revenue.

The phrase, "waste reduction and recycling" has wide consumer recognition and acceptance. Consumers are actively looking for "green" products and environmentally friendly businesses. By adopting a WR/R program you can join the solution to problems like: solid waste, air and water pollution and resource depletion. Your actions will be noticed by the media, your customers, the community you are a part of, and your competition.

Another benefit of WR/R is improved employee morale. You may be surprised to learn how much your employees will support such a program. Many of them are probably avid recyclers at home. Their enthusiasm will be an important factor in the success of your efforts.

See Appendix A for more information on the environmental benefits of WR/R.

WHERE YOUR BUSINESS FITS

The program you develop will depend upon what type of business is involved. While this manual does not provide specific knowledge about your business, it does give you the information you need to determine what will work best for you. Office buildings, shopping malls, grocers, chains and independents all offer different opportunities for WR/R.

Offices produce large quantities of paper which can be reduced, reused in-house, then recycled.

Grocers, warehouses, and department stores produce cardboard boxes and wooden pallets. Grocers have produce boxes that can be returned to and reused by farmers.

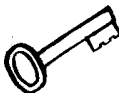

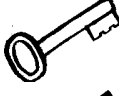
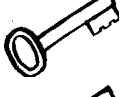








Restaurants, bars, and hotels produce glass, aluminum, and plastics as well as cardboard for recycling. Linen, china and flatware can be used in place of disposables to reduce waste.

Manufacturing firms produce recoverable materials such as scrap metals, plastics, textiles, and other materials. Changes in manufacturing methods and packaging types can reduce waste.

WASTE REDUCTION AND RECYCLING:

- * reduces disposal costs
- * generates revenue
- * enhances the image of your business
- * improves employee morale
- * conserves natural resources
- * cuts down the purchase of disposable products

12 KEYS TO SUCCESS

-  **Get Management's Commitment.**
-  **Survey Employee Interest.**
-  **Find An Enthusiastic Person To Be Your WR/R Coordinator.**
-  **Set Goals.**
-  **Determine What You Will Recycle.**
-  **Determine How You Can Reduce Waste.**
-  **Select A Recycler.**
-  **Design A Collection And Storage System.**
-  **Educate Your Staff.**
-  **Promote And Implement The Plan.**
-  **Monitor The Program And Make Adjustments Where Necessary.**
-  **Close The Loop By Purchasing Recycled Products.**

The "12 Keys to Success" are adaptable and should not be viewed as the only way to succeed. Rearrange the order to suit your needs or add steps that have not been included.

LET'S GET STARTED

Thorough planning and careful follow-through are critical to creating and operating a successful business WR/R program. Let's look at the "12 Keys to Success" in more detail.



GET MANAGEMENT'S COMMITMENT

Having the support of top management will:

- provide easier access to funds and resources such as staff and company owned materials

- send a message that waste reduction and recycling is important to your business; that your company is committed to helping the Earth

- provide stability to the program

- tell non-participating employees that they are in the minority

Use the reasons above, plus any reasons specific to your business, to win management over to the world of waste reduction and recycling.

It may be in your best interest to research some of the "Keys" before making any presentations. Knowing what your company could reduce and recycle, how much money would be saved, and what kind of problems may be encountered will add strength to your proposal. However, the support of top management is a critical factor and should be one of the first priorities.



SURVEY EMPLOYEE INTEREST

Get employee input; find out what they want, what they will do, what they already do, and what they know. A sample questionnaire is located in Appendix B.

Having employee support will:

allow the waste reduction and recycling program to succeed; without employee interest and effort, it simply will not happen.

make the day to day running of the program a lot easier for upper management.

allow employees to take ownership and pride in the program and make it their own.



FIND THE RIGHT PERSON

While gaining employee input find a person to run the program. Assigning the responsibility will not be the best action. Find out who is interested and choose the best person. The person you choose should be committed to WR/R, be efficient, energetic, organized, a good communicator, and patient. He/She will need to have the creativity to look for new ways to do things and be able to coordinate many details. A degree in waste management is not necessary; common sense and commitment are really the best tools. The person you choose will be primarily responsible for selecting a recycler, forming the program plan, developing the collection system, educating the employees, monitoring successes and failures, and handling the day to day running of the program.

If your business is a larger one, you may also need to recruit several employees to assist the coordinator. These people would help monitor the program. They would make sure the recycling containers are free of non-recyclable trash, keep containers from overflowing, offer tips on waste reduction, and encourage participation in the program.

It is important that all persons working on the WR/R program have time allocated to perform this work as part of their job descriptions. Time commitment will vary, but after the program starts, little more than a few hours each month to maintain and monitor the program should be necessary.



SET GOALS

It is important to choose realistic and achievable goals. However, it is just as important not to constrain your imagination. The realm of waste reduction and recycling is an emerging field, and no idea is a bad one. Be creative.

Your goal can be qualitative like "our goal is to significantly reduce the volume of our waste stream." Better still, you may want to set quantitative goals which offer a visible measure of success. An example could be: "our goal is to cut the volume of waste from our office in half or "our goal is to cut our weekly garbage pickup from a 5 cubic yard container to a 3 cubic yard container."

You can choose different routes to reach your goals. If waste reduction is your main priority, look for ways to substitute reusable products for disposables, replace short life products with durable, repairable products, and reuse where possible. If your goal is to divert as much material from the waste stream as possible, you will want to set up a system that sets aside all materials that have the potential to be recycled. If, on the other hand, your goal is to achieve the highest revenue return from recycling, you will want to look at only those materials that have a high current value in the marketplace.

Record your goals and post them in a conspicuous place for all employees to see.

POSSIBLE GOALS:

- * reduce the volume of waste disposed
- * reduce waste disposal costs
- * generate revenues from recyclables
- * improve environmental quality
- * cut costs by using materials more efficiently



DETERMINE WHAT YOU CAN RECYCLE

Wherever something is going on in your business, chances are that activity is generating recyclables. Walk through your facility and locate the activity centers that produce waste. Observe the waste generation patterns. Think about why these waste materials are generated and how they could be avoided.

Look in your dumpster. Does it contain materials that could be recycled? Do these materials enter the waste stream already mixed or can they be kept separate for recycling? Trace these materials back to their point of origination. Don't limit yourself to the obvious areas of waste generation such as office and administration areas, warehouses, storage, mailrooms and distribution areas. Look also at maintenance facilities, motor pools, and your grounds and landscaping operations.

Use the waste generation information in Appendix C to assist you in estimating your volume of recyclables.

When looking for recyclables, consider the materials listed below to start. Of course, markets for recyclables will vary according to region. See the list of local contacts in Appendix D. They will be able to tell you what recyclable materials are marketable in your area.

LIST OF COMMON RECYCLABLES

aluminum cans	rag
scrap iron or steel	cardboard
cooking oil	used motor oil
glass bottles	tin and steel cans
grass clippings	office paper
non ferrous metals	magazines
newspapers	pallets
plastic (bottles, shrink wrap, other)	phonebooks



DETERMINE HOW YOU WILL REDUCE WASTE

Waste reduction is Washington State's first priority in solid waste management and should be integrated with recycling. If you don't produce it in the first place, you won't have to handle it at all.

While you walk through your facility locating recyclable materials look for opportunities to reduce waste. Be open to employee suggestions. Many waste reduction ideas come from the people handling materials on a daily basis.

Below is a sampling of actions you may take to reduce the amount of materials you have to dispose of.

For the office:

Copy on both sides of paper for all documents.

Circulate memos, documents and reports rather than making individual copies for all office personnel.

Save documents on floppy disks rather than making paper copies.

Use the back side of single copies for other uses.

Reuse envelopes and other office materials such as file folders, boxes, empty containers, etc.

Use centralized files rather than individual files for each employee.

Recharge laser printer cartridges rather than replacing.

Use rechargeable batteries.

General Waste Reduction Tips:

Order merchandise in bulk and ask suppliers not to overpackage orders.

Request that deliveries be shipped in returnable containers.

Use refillables products rather than disposables.

Use durable, reusable products, i.e. ceramic coffee mugs in the lunchroom, cloth hand towels in the restrooms, reusable flatware.

Promote the sale of durable and reusable goods to your customers and feature these items in your advertising campaigns.

Repair rather than replace.

Ask your supplier to use shredded paper (or some other easily recyclable material) for packing.

Reuse styrofoam peanuts you have already received or offer them to someone who will.

Donate used or discarded goods and equipment to charitable organizations, day care centers, and others.

Return or repair wooden pallets.

Remove your company name from unwanted mailing lists by writing to:

Direct Marketing Association
6 East 43rd St.
New York, NY 10017

Ask to be eliminated from mailing lists. This will stop your name from being sold by most large mailing list companies. This will reduce new pieces of unsolicited mail going to your address by up to 75%, but will not affect the mail you receive from companies that already have your address.



SELECT A RECYCLER

Where to Find Recyclers

The Washington Department of Ecology's information line
(1-800-RECYCLE)

Your current garbage hauler

The local Chamber of Commerce

The Yellow Pages

Appendix C

How to Choose a Recycler

The information you have gathered and the goals you have set should guide you as you select a recycler. If possible, approach several recyclers. Tell them what materials you will be recycling and ask questions. Here are a few examples:

Will they pick-up your material?

* Will they pick-up weekly, or "on-call"?

Will they charge for pick-up?

Will the recycler assist in program design?

What are the haulers needs in, storage and pick-up areas?

Will they provide containers and other needed equipment?

How should the material be prepared prior to pick-up?

Will they help educate your employees?

Is a contract necessary?

Pros and Cons of Contracts

Whether or not you decide that a contract is necessary is up to you. Consider that if the market drops, a contract can keep a recycler from dropping your recyclables until the market improves. On the other hand, by entering into a contract you will probably receive less money for your recyclables because of the risk assumed by the recycler.

Recycling is a Business

Remember that your recycler is a business person, making a profit from your "waste". You should be aware that few recyclables earn big dollars. Even if a hauler charges you for the pick-up of low value recyclables, you can still come out ahead by avoiding the costs of disposing those materials.

If your individual business doesn't generate enough recyclables to interest a recycler, ask your building manager or other businesses in the area to form a cooperative recycling venture.



DESIGN A COLLECTION AND STORAGE SYSTEM

Now is the time to begin looking at the logistics of a recycling program. Use your recycler as a resource. This expert will have experience with past successes and failures and may be willing to walk through your workplace and help create your program. Your fire marshall is a crucial contact. Local fire codes must be met by any recycle program.

Consider the following questions while creating your program:

- * Do you have copy rooms and office staff that put out a lot of waste paper?
- * Do you have a cafeteria where aluminum and glass beverage containers are generated?
- * Is your storage area filled with the cardboard containers your products were delivered in?
- * Where can your recyclables be stored in between pick-ups?
- * Can the storage area be locked?
- * Is there easy access for pick-up?



EDUCATE YOUR STAFF

The education of your staff is vital. They are the primary handlers of recyclables in the workplace and they need to know what your business is recycling, where to deposit it, who to call with problems, and why it is important that they participate. They will also need to be encouraged to reduce waste and to reuse materials rather than purchase new products. You may find it takes quite a bit more education than you anticipated. Be patient. Adequate education is one of the most important factors in a successful R/R program. Do not wait to begin your program, however. Education can work even better once the program has started. You may find that your recycler has an education program already designed. You and your employees will benefit from this resource.



PROMOTE AND IMPLEMENT THE PLAN

Select a date and begin the WR/R program. Let employees know in advance when the program will start. You can choose to have a kickoff event and throw a party, or distribute a memo stating that the collection sites are in place and waiting to be filled. Having a party is fun, though, and can help bill recycling as something enjoyable, not just another task to accomplish.



Methods for Communicating with Employees

- * staff meetings
- * employee newsletter
- * promotional materials (posters, stickers, buttons, etc.)
- * descriptive flyers



MONITOR THE PROGRAM

It is very important to check the recycle containers and see that everyone is recycling as they should be. Do not be discouraged if you find non-recyclables. It may take a while for everyone to acquire the habit of recycling. Keep up the education and, if possible, ask the employees what would help their efforts. Perhaps you need more containers. Perhaps the custodial staff was not informed. They would see the containers as more garbage bins.

Be sure to compliment a job well done. Updates showing progress will motivate employees to keep up the good work. Program statistics such as tons diverted, costs avoided, and resources saved are great for building morale. Allow for changes and modifications. In the future you may even decide to increase the number of materials that you recycle. The follow up process lasts as long as your program does.



CLOSE THE LOOP

This phrase simply means, "purchase products made from recycled materials." "The recycling process is not complete until the recyclable material is remade into a new product and purchased. Market gluts occur when there is not enough demand for recycled products. Inform your supplier that you prefer recycled and recyclable materials in your products and their packaging. You are their client and they want to keep your business. You may be surprised to find out how much your preferences will affect their purchasing decisions. Turn to Appendix E or call 1-800-RECYCLE to learn where you can buy recycled office paper and other recycled supplies.

OTHER TIPS

If you are currently destroying confidential material and feel that recycling is not a safe method of destruction, consider the end result. Paper that is recycled is de-inked and repulped, completely destroying all printed words. Incineration can be an efficient means of destruction, but is not always guaranteed by the garbage hauler. Recycling the material will cost less and be more effective than shredding. Recycling does not have to replace shredding, however. Destruction will be most effective when the two are used together.

CONCLUSION

You now have the information you need to construct a WR/R program for your business. Good luck! As with all new ventures, there will be difficulties and frustrations. However, the finished product will be well worth the effort.

Appendix A-Environmental Benefits of Recycling

Paper

Recycling one ton of Paper saves: 17 pulp trees; 682.5 gallons oil; 10,401 KWH; and 3.3 cu. yds of landfill space. 12

Recycling one ton of paper saves enough energy to power an average home for 6 mos.

Recycling one ton of paper prevents 60 pounds of air pollutants.

Recycling one ton of paper saves 7000 gallons of water.

Aluminum

Recycling aluminum uses 96% less energy and cuts air pollution by the same amount. 11.

Recycling aluminum cuts water pollution by 91% and uses 95% less water.

Glass

Recycling glass uses 8% less energy and 50% less water. 11

Recycling glass will prevent 20% air and 50% water pollution from being released into the environment. 11

Newsprint

Recycling one ton of newsprint saves 55 to 80 cubic feet of landfill space.

Recycled newsprint takes 25-60% less energy to make than that from wood pulp. 7

Steel

Recycling steel uses 47-75% less energy and 40% less water. 11

Recycling steel cuts water pollution by 75% and air pollution by 86%. 11

Plastic

Recycling Polyethylene uses 97% less energy. 4

Batteries

Recycling one vehicle battery will prevent 20 pounds of lead and one gallon sulfuric acid from entering the environment.

Appendix B--Employee Survey

The idea of starting a Waste Reduction and Recycling (WR/R) program here in the building is under consideration and we need your input. Please fill out this survey and return it to the Operations Manager by _____. We look forward to your comments.

Are there any recycling efforts currently running within your office or section?

Yes_____ What materials? _____

What section? _____

No_____

Would you participate in a recycling program here in the bldg?

Yes_____

No_____ why not?_____

What materials would you recycle?

White paper _____

Colored paper _____

Mixed waste paper _____

Newsprint _____

Cardboard _____

Aluminum _____

Glass _____

Plastic _____

Batteries _____

Other _____

Interested in coordinating the WR/R program? Write your name and number _____

Interested in assisting a coordinator? Write your name and number _____

Will you participate in waste reduction activities like:

-copying on both sides of paper

-using durable instead of disposable kitchenware

(plus many more)

If you have more comments, please continue them on the back. We appreciate your time and interest. You will be receiving information on program details in the future. Please be patient, this is new to all of us.

Thanks,

The Management

Appendix C--Self-Audit Checklist

- () Planning Preparation
 - research waste stream and financial considerations (see waste generation information and cost/benefit analysis located below)
 - present proposal to management, gain their support
 - research employee interest and support
- () Laying the Foundation
 - find a waste reduction and recycling coordinator
 - set goals
 - determine what you will recycle and how you will reduce waste
 - design a collection and storage system
- () Getting the Program On-Line
 - select a recycle hauler
 - educate your staff
 - promote and implement the program
 - monitor results
- () ____al Stage
 - close the loop by purchasing products made from recycled materials

Cost/Benefit Analysis

Some of the information requested below will be difficult to obtain. Guessing may be the most valid source of information available. Even rough estimates will show the financial benefit of a WR/R program.

1. Current solid waste disposal costs.
\$_____/year \$ ____/ cubic yard
2. Estimate volume that could be diverted from the waste stream.
\$____cubic yds/yr
3. Amount saved through reduced disposal costs.

Disposal fee minus (cubic yards of recyclables X cost/cu. yd.) =
\$_____/year
4. Revenue generated by selling recyclables. \$_____/year
5. Amount saved through waste reduction activities (this includes ordering less paper, purchasing fewer disposables, etc.). \$_____/year
6. Potential cost of implementing a WR/R program. Include investments in recycling equipment and durable goods. \$_____/year
7. Collection of recyclables.\$ \$_____/year
8. Labor costs (# employees X # hrs/wk X wage).
Recycling coordinator \$_____/year
Supporting staff \$_____/year
9. Financial benefit of a waste reduction/recycling (WR/R) program. (#3 + #4 + #5)
\$_____/year
10. Financial cost of a WR/R program. (#6 + #7 + #8) \$_____/year
11. Benefit/cost of a WR/R program. (#9 minus #10) \$_____/year

APPENDIX E

RECYCLED PRODUCT DIRECTORY

Information for this directory has been drawn from the Clean Washington Center's October 1991 Recycled Product Directory. To list a recycled product in their directory, please contact the Clean Washington Center at (206) 464-7350. The Center also operates an on-line database of recycled products. This database can be accessed by anyone with a modem by calling either (206) 441-5472 or 1-800-622-4673.

All information contained in this directory was obtained from the companies listing the products. Neither the Clean Washington Center nor the Washington Department of Ecology make any warranty, expressed or implied, or assume any legal liability or responsibility for the products or processes disclosed in this document. Reference to any specific commercial product, process, or service by trade name, mark, manufacturer or otherwise does not constitute or imply its endorsement or recommendation by the Clean Washington Center, Department of Trade, or Department of Ecology.

This directory includes the following categories of recycled products:

building and construction materials	xiii
compost and organic materials	v
fuels	xii
landscape and recreation products	iv
miscellaneous	xii
office supplies and products	vii
packaging products	iv
paper products	i
transportation and road building products	ix

PAPER PRODUCTS

Paper (All Types)

Trick and Murray, 300 SW 41st St., Renton, WA 98055
phone: (206) 251-8300; FAX: (206) 251-9077
contact: Debe Arkell

Western Paper Company, 7011 S. 188th St., Kent, WA 98032
phone: (206) 251-5300; FAX: (206) 251-8459
contact: Mr. James Shelton

Bond and Writing Papers

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Book Paper

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

Text Paper

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Xerographic Paper

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Offset Paper

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Cover Stock

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Uncoated Posterstock

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Other Printing Papers

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz.

Facial Tissue

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Industrial Wipers

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

Napkins

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Toilet Tissue

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Paper Towels

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Continuous Form 11, 14

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Facsimile Paper

Appleton Papers, Inc. 825 E Wisconsin Ave, Appleton WI 54911
phone: (414) 749-8749; FAX: (414) 730-7365
contact: Mr. Phillip Corazzari

Carbonless Paper

Appleton Papers, Inc. 825 E Wisconsin Ave, Appleton WI 54911
phone: (414) 749-8749; FAX: (414) 730-7365
contact: Mr. Phillip Corazzari

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

PACKAGING PRODUCTS

Packaging Products

Western Paper Company, 7011 s 188th St., Kent WA 98032
phone: (206) 251-5300; FAX: (206) 251-8459
contact: Mr. James Shelton

Mailing Bags

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Plastic Bags

Webster Industries, P O Box 2886, Oakland CA 94618
phone: (415) 655-6402; FAX: (415) 654-4911
contact: Mr. Allen Norleen

Paper Packing Material

EcoPak Industries, Inc., 7859 S 180th Street, Kent WA 98032
phone: (206) 251-0918; FAX: (206) 251-8457
contact: Mr. Jim Miller

LANDSCAPE AND RECREATION PRODUCTS

Fencing

Recycled Plastics Marketing, Inc. 17813 NE 8th Pl, Bellevue, WA 98008
phone: (206) 649-0846; FAX: (206) 649-0847
contact: Mr. John Bissell

Park Benches

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Recycled Plastics Marketing, Inc., 17813 NE 8th Place, Bellevue WA 98008
phone: (206) 649-0846; FAX: (206) 649-0847
contact: Mr. John Bissell

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Picnic Tables

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Recycled Plastics Marketing, Inc., 17813 NE 8th.Place, Bellevue WA 98008;
phone: (206) 649-0846; FAX: (206) 649-0847;
contact: Mr. John Bissell

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Timber (For Landscaping)

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Athletic Surfaces

Atlas Tracks, 223 Foothills Rd, Lake Oswego OR 97034
phone: (503) 636-8108; FAX (503) 635-3976
contact: Mr. Floyd Fisher

COMPOST AND ORGANIC MATERIALS

Compost

Northwest Cascade, Inc., 16207 E Meridian (Mailing PO BOX 73399) Puyallup WA 98373;
phone: (206) 848-2371; FAX: (206) 848-2545;
contact: Mr. Mike Baxter

Yard Debris Compost

Cedar Grove Compost Co., 54 S Dawson, Seattle, WA 98034
phone: (206) 763-2700; FAX: (206) 767-2404
contact: Ms. Susan Leger

Dowell Co., 760 N Central Avenue, Kent WA 98032
phone: (206) 852-1700
contact: Mr. Steve Dowell

Iddings, Inc., 27525 Covington Way SE, Kent WA 98042
phone: (206) 630-0600; FAX: (206) 631-2801
contact: Mr. Larry Martinson

Compost Bins

Barclay Recycling, 75 Ingram Drive, Toronto, Ontario, Canada M6M 2M2
phone: (416) 240-8227; FAX: (416) 240-0114
contact: Mr. John David Barclay

Recycled Plastics Marketing, Inc., 17813 NE 8th Place, Bellevue WA 98008;
phone: (206) 649-0846; FAX: (206) 649-0847;
contact: Mr. John Bissell

Topsoil

Northwest Cascade, Inc., 16207 E Meridian (Mailing PO BOX 73399) Puyallup WA 98373;
phone: (206) 848-2371; FAX: (206) 848-2545;
contact: Mr. Mike Baxter

OFFICE SUPPLIES AND PRODUCTS

Office Supplies

Trick & Murray, 300 SW 41st St., Renton, WA 98055
phone: (206) 251-8300; FAX: (206) 251-9077
contact: Ms. Debe Arkell

Desk Pads

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

Legal Pads

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

Writing Pads

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

Perforated Pads

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

Envelopes

Paper Mills Agency, 1213 First Ave S., Seattle, WA 98134
phone: (206) 622-6156; FAX: (206) 623-0439
contact: Ms. Annette Lukasiewicz

Adding Machine Rolls

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

Binders

McBee, 6815 Lake Washington Blvd SE, Renton WA 98056
phone: (206) 228-7672; FAX: (206) 228-7355
contact: Mr. Dan Lysne

Padded Mailing Bags

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Self Stick Notes

3M Company, 10230 NE Points Dr. Suite 550, Kirkland WA 98033;
phone (800) 367-6213; FAX: (206) 889-4010;
contact: Mr. Bob Olsen

Toner Cartridges

American Laser Chargers, 1301 Franquette Ave Suite C, Concord CA 94520;
phone: (415) 827-9226; FAX: (415) 827-9226;
contact: Mr. Bob Chase

Laser Fax, Inc., 2020 124th Ave #C-207, Bellevue WA 98005
phone: (206) 883-9398; FAX: (206) 883-9512
contact: Mr. Mike Stead

Laser Resource, Inc., 14324 SE Stark, Portland OR 97233,
phone: (800) 727-5775; FAX: (503) 253-1136
contact: Ms. Karen Irish

Reinked Printer Ribbons

American Laser Chargers, 1301 Franquette Ave Suite C, Concord CA 94520;
phone: (415) 827-9226; FAX: (415) 827-9226;
contact: Mr. Bob Chase

Steno Book

Everett Pad and Paper Co., Inc. 2216 26th St. Everett WA 98201;
phone: (206) 259-2133; FAX: (206) 252-5914;
contact: Mr. Gary Kenna

BUILDING AND CONSTRUCTION MATERIALS

Plastic Lumber

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Carpet

Image Carpets, 2502 Barranca, Irvine CA 92630
phone: (714) 660-1661; FAX: (714) 261-7067
contact: Mr. Larry Poston

Floor Mats

Atlas Tracks, 223 Foothills Rd, Lake Oswego OR 97034
phone: (503) 636-8108; FAX (503) 635-3976
contact: Mr. Floyd Fisher

Mat Factory, 760 E 16th St., Costa Mesa CA 92627
phone: (714) 645-3122; FAX: (714) 645-0966
contact: Mr. Roger Maloney

RB Rubber Products, 904 E 10th Ave., McMinnville OR 97128
phone: (800) 525-5530; FAX (503) 434-4455
contact: Mr. John F. Whitney

Insulation

Energy King, 14235 SE 98th Court, Clackamas OR 97015
phone: (503) 653-5000; FAX: (503) 653-0467
contact: Mr. Dennis Danielson

Insul-Tray, Inc., P O Box 3111, Redmond WA 98073-3111
phone: (206) 861-0525; FAX: (206) 869-6438
contact: Mr. Ed Story

Oregon Insulation, 5805 SW 107th Ave. Ste. A, Beaverton OR 98005;
phone: (503) 626-2201;
contact: Mr. Glen Erickson

Shower Dividers

Benz Building Specialties, 3822 SW Corbett St. Portland OR 97201;
phone: (503) 228-7296; FAX: (503) 228-7351;
contact: Mr. Tom Benz

Toilet Partitions

Benz Building Specialties, 3822 SW Corbett St.
Portland OR 97201; phone: (503) 228-7296;
FAX: (503) 228-7351; contact: Mr. Tom Benz

Vanities

Benz Building Specialties, 3822 SW Corbett St.
Portland OR 97201; phone: (503) 228-7296;
FAX: (503) 228-7351; contact: Mr. Tom Benz

Locker Room Benches

Benz Building Specialties, 3822 SW Corbett St.
Portland OR 97201; phone: (503) 228-7296;
FAX: (503) 228-7351; contact: Mr. Tom Benz

Blasting Mats

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd.,
Woodinville WA 98072; phone: (800) 488-2255;
FAX: (206) 488-2424; contact: Mr. Dennis Kerber

Building Panels

Mansion Industries, Inc., P O Box 2220, Industry CA 91746
phone: (818) 968-9501
contact: Ms. Sue Glassco

TRANSPORTATION AND ROAD BUILDING PRODUCTS

Antifreeze

Anti-Freeze Environmental Service, 4500A 15th St. E
Tacoma WA 98424; phone: (206) 483-9197;
FAX: (206) 926-0599; contact: Mr. Robert Wander

Lilyblad Petroleum Inc., P O Box 1556, 2244 Port of Tacoma,
Tacoma WA 98401; phone: (206) 682-1990;
FAX: (206) 383-8724; contact: Mr. John Schute

Truck Trailer Bumper

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd.,
Woodinville WA 98072; phone: (800) 488-2255;
FAX: (206) 488-2424; contact: Mr. Dennis Kerber

Other Vehicle and Equipment Parts

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd.,
Woodinville WA 98072; phone: (800) 488-2255;
FAX: (206) 488-2424; contact: Mr. Dennis Kerber

Road Subbase Material

Renton Concrete Recyclers, 1627 Filbert Rd SE,
Bothell WA 98012; phone: (206) 481-9101;
FAX: (206) 486-3346; contact: Mr. Gordon Vigus

Fill Material

Renton Concrete Recyclers, 1627 Filbert Rd SE,
Bothell WA 98012; phone: (206) 481-9101;
FAX: (206) 486-3346; contact: Mr. Gordon Vigus

Roadbed Sealants

Special Asphalt Products, Inc., 710 S Railroad Ave.
Kent WA 98032; phone: (206) 859-2886;
FAX: (206) 859-5081; contact: Mr. Barney Balcom

Roadway Resurfacer

Special Asphalt Products, Inc., 710 S Railroad Ave.
Kent WA 98032; phone: (206) 859-2886;
FAX: (206) 859-5081; contact: Mr. Barney Balcom

Parking Bollards

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Road Signs

Recycled Plastics Marketing, Inc., 17813 NE 8th Place,
Bellevue WA 98008; phone: (206) 649-0846;
FAX: (206) 649-0847; contact: Mr. John Bissell

Signposts

Recycled Plastics Marketing, Inc., 17813 NE 8th Place,
Bellevue WA 98008; phone: (206) 649-0846;
FAX: (206) 649-0847; contact: Mr. John Bissell

Speed Bumps

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Recycled Plastics Marketing, Inc., 17813 NE 8th Place,
Bellevue WA 98008; phone: (206) 649-0846;
FAX: (206) 649-0847; contact: Mr. John Bissell

Special Asphalt Products, Inc., 710 S Railroad Ave.
Kent WA 98032; phone: (206) 859-2886;
FAX: (206) 859-5081; contact: Mr. Barney Balcom

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Parking Stops

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Recycled Plastics Marketing, Inc., 17813 NE 8th Place, Bellevue WA 98008;
phone: (206) 649-0846; FAX: (206) 649-0847;
contact: Mr. John Bissell

Special Asphalt Products, Inc., 710 S Railroad Ave. Kent WA 98032;
phone: (206) 859-2886; FAX: (206) 859-5081;
contact: Mr. Barney Balcom

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Engine oil

Lilyblad Petroleum Inc., P O Box 1556, 2244 Port of Tacoma, Tacoma WA 98401;
phone: (206) 682-1990; FAX: (206) 383-8724;
contact: Mr. John Schute

Morrison Oil Company, P O Box 17339, 3747 N Suttle Rd. Portland OR 97217;
phone: (503) 286-1673; FAX: (503) 286-4285; contact: Mr. Ed Beaver

Basestock Oil

Mohawk Lubricant, 130 Forester St. N, North Vancouver, BC Canada V7H 2M9
phone: (604) 929-3462; contact: Mr. John MacDonald

Hydraulic oil

Lilyblad Petroleum Inc., P O Box 1556, 2244 Port of Tacoma, Tacoma WA 98401;
phone: (206) 682-1990; FAX: (206) 383-8724;
contact: Mr. John Schute

Morrison Oil Company, P O Box 17339, 3747 N Suttle Rd. Portland OR 97217;
phone: (503) 286-1673; FAX: (503) 286-4285;
contact: Mr. Ed Beaver

Industrial Oil

Appleton Papers, Inc. 825 E Wisconsin Ave, Appleton WI 54911
phone: (414) 749-8749; FAX: (414) 730-7365
contact: Mr. Phillip Corazzari

Marine Products

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

Vanco, 220 Main Street, Edmonds WA 98020
phone: (206) 711-1214; FAX: (206) 670-2150
contact: Mr. Larry Norman

Fenders-Marine

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd., Woodinville WA 98072;
phone: (800) 488-2255; FAX: (206) 488-2424,
contact: Mr. Dennis Kerber

Pilings

Charles R Watts Co, 10 Creekwood Lane SW, Tacoma WA 98499
phone: (206) 581-2198; FAX: (206) 588-4230
contact: Mr. Scott Chandler

SCRAP FUEL PRODUCTS

Scrap Tire Fuel

Waste Recovery Inc., 8501 N Borthwick, Portland OR 97217
phone: (503) 283-2261; FAX: (503) 283-2498
contact: Mr. Mark Hope

MISCELLANEOUS PRODUCTS

Plastic Bags

Webster Industries, P O Box 2886, Oakland CA 94618
phone: (415) 655-6402; FAX: (415) 654-4911
contact: Mr. Allen Norleen

Compost Bins

Barclay Recycling, 75 Ingram Drive, Toronto, Ontario, Canada M6M 2M2
phone: (416) 240-8227; FAX: (416) 240-0114
contact: Mr. John David Barclay

Trash Receptacles

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

Recycled Plastics Marketing, Inc., 17813 NE 8th Place, Bellevue WA 98008;
phone: (206) 649-0846; FAX: (206) 649-0847;
contact: Mr. John Bissell

Plates

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Bowls

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275
phone: (206) 623-1850
contact: Mr. Jim Rasmussen

Serving Trays

West Coast Paper, P O Box 3775, Seattle, WA 98124-2275

phone: (206) 623-1850

contact: Mr. Jim Rasmussen

Recycled Feedstocks

Partek Corporation, P O Box 1387, Vancouver WA 98666

phone: (206) 695-1777; FAX: (206) 695-8994

contact: Mr. Bob Gaudet

Bumpers-Protective

F E Bennett Co., 333 NW 5th Ave., Portland OR 97209

phone: (503) 228-2321; FAX: (503) 226-9228

contact: Mr. Don Bennett

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd., Woodinville WA 98072;

phone: (800) 488-2255; FAX: (206) 488-2424;

contact: Mr. Dennis Kerber

Laminated Rubber

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd., Woodinville WA 98072;

phone: (800) 488-2255; FAX: (206) 488-2424;

contact: Mr4 Dennis Kerber

Wheel Chock

Schuyler Rubber Co., Inc., 16901 Wood-Red Rd., Woodinville WA 98072;

phone: (800) 488-2255; FAX: (206) 488-2424;

contact: Mr. Dennis Kerber

Art Glass

Bullseye Glass Co., 3722 SE 21st St., Portland OR 97202

phone: (503) 232-8887; FAX: (503) 238-9963

contact: Ms. Lani McGregor

Recycling Products

Arata Equipment Company, 384 Oyster Point Blvd. Suite 1 South San Francisco CA 94080;

phone: (415) 875-1010; FAX: (415) 875-7555;

contact: Mr. Dave Fall

Asplund Supply, 49 - 37th Street NW, Auburn, WA 98001
phone: (206) 735-3300; Fax (206) 931-1135
contact: Mr. Patrick Schneider

Bag Connection, Inc., 459 9th Street, Dundee OR 97115
phone: (800) 228-2247; FAX: (503) 538-0418
contact: Mr. Douglas Bunn

Bibliography

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2. "Best Management Practices for Solid Waste: Recycling and Waste Stream Survey." Washington State Department of Ecology.
3. "Assisting Commercial Recycling: Commercial Waste Audits." Ruth Bell and Robin L.M. Robertson. For the 8th National Congress, by R.W. Beck and Associates. 1989.
4. "Energy Savings from the Recycling of Selected Materials." Resource Conservation Consultants.
5. "Estimating Recyclables in the Commercial Waste Stream." David Cerrato. For the National League of Cities Annual Recycling Conference. 1989.
6. "Recycling for Business: Workshop folder." For Seattle Solid Waste Utility, by R.W. Beck and Associates, Pacific Energy Institute, and Morely & Associates. 1990.
7. State of the World, 1990. Worldwatch Institute. (New York. W.W. Norton and Company. 1990).
8. "Source Separation and citizen Recycling." Robert Cowles and Mary T. Sheil, in William D. Robinson, ed., the Solid Waste Handbook. (New York. John Wiley and Sons. 1986).
9. "The Possibilities and Practicalities of Business Waste Recycling." Mecklenburg County, N.C. 1988.
10. "Waste Reduction and Recycling: Audit Manual for Government Facilities." Washington State Department of Ecology. Waste Reduction, Recycling and Litter Control Program.
11. "Waste Reduction Techniques for Business and Industry." Integrated Waste Management Board. State of California.
12. "Your Office Paper Recycling Guide." San Francisco Recycling Program.